

The purpose of this policy is to allow Lenexa home builders the opportunity to utilize 3rd party inspectors to perform certain inspections for one and two family dwellings in lieu of inspections by the City inspectors. This will allow increased flexibility on the part of contractors to obtain inspections outside of normal city work hours or as required by the contractor to meet time schedules.

Allowed third party inspections

Form – Concrete Footings & Structural Slabs

- Pier foundation system
- Footings
- Slabs
 - Elevated
 - Structural

Form – Foundation and Retaining Walls

- Foundation walls
- Retaining walls

Qualified Inspectors

Third party inspections shall be performed by qualified individuals knowledgeable with the requirements of the items being inspected. They shall be Kansas licensed engineers or architects or personnel employed by and working under the direct supervision of the licensed engineer or architect.

Forms

Inspection results shall be submitted on the City of Lenexa Special Inspection Certification forms.

Submittal of completed reports

The special inspection certification reports shall be submitted to the City upon completion. Failed reports are not required to be submitted. Faxed copies of the completed report will be accepted (an original copy of the report with original seals and signatures is not required). The City fax number is listed on the form. Supplemental information necessary to verify compliance shall accompany the form.

Alternate designs from the approved plans

Plans shall comply with the design specifications shown on the approved plan; however, standard prescriptive accepted practices as listed below are permitted provided the design provides an equivalent or greater level of structural compliance based on the site conditions. Other alternate designs should be submitted and approved in advance of the inspection. A copy of the alternate design used shall be submitted with the inspection report.

Approved Alternate Designs

- City of Kansas City, Missouri – Information Bulletin – IB114, One- and Two-Family Standard Garage Slab and Foundation Wall Details: These details are approved; however, #4 vertical reinforcement at spacing greater than 24 inches o.c. is not approved unless substantiated by a soils report and calculations.
- Residential Foundation Guidelines for Johnson County, KS

Instructions and interpretations

Prior to any inspection, **erosion control** measures required by the City must be in place and functional. The functional terminology has been included to allow some flexibility to perform the inspection even though there are some minor deviations from the city requirements provided the overall installation is adequate and performing the intended purpose to effectively control erosion.

City **approved plans** are required to be on the job site during all inspections.

Prior to the inspection, the **contractor** should provide the inspector with evidence that previous required inspections have been performed and accepted. For example, to perform inspections of foundation walls, the contractor should provide the inspector with evidence that the footing was inspected and approved.

At the **footing inspection**, the foundation contractor (or special inspector) is required to certify that the footing is being installed at an appropriate elevation. The ***Elevation Certification Form*** shall be submitted with the inspection report. A copy of the form should be attached to the City approved plan on the job site. Forms are available on the City of Lenexa website under Applications & Forms. The certification is required to assure the top of the foundation and basement floor, in case of a walkout, is being installed within the permitted tolerances to assure houses are constructed at uniform elevations relative to the streets and rear yard drainage at walkouts can be accomplished.

Inspection of **deck pier** depth is not required. Inspection is required for piers supporting covered decks.

At the **foundation wall** inspection, it is recommended that **hold downs** for braced walls be secured in place prior to the pour; however, the City will accept verification that the approved hold downs are available on the site at the time of inspection in lieu of being secured in place. Contractors have had significant problems getting hold downs in the appropriate location. In the comments section the inspector should note whether hold downs are secured in place or are on site to be stabbed later.

Where **window wells** serve as the approved secondary means of egress from basements, the finished openable portion of the window should not be more than 44 inches above the finished floor. It is recommended that blockouts for windows be not more than 36 inches above the top of the footing where the floor slab rests on the top of the footing. This provides an allowance of 4 inches for the window and 4 inches for the basement floor slab. Window well areas should not be moved or expanded unless approved in advance to assure wall bracing load paths are considered.

Where lots are constructed adjacent to **engineered swales**, the **MLO** (Minimum Low Opening) and/or **MFE** (Minimum Low Floor) elevations must be certified by a licensed surveyor prior to obtaining inspections beyond the foundation wall. The plumbing ground rough will not be inspected until the MLO/MFE elevations have been verified and accepted by the City. Although not specifically required to be verified by Special Inspection, the inspector should consider opening elevations from the plot plan and determine if the installation appears to satisfy the minimum elevations noted on the approved plot plan.

If there is a **retaining wall** on the lot taller than 4'-0" - as measured from the bottom of the footing to the top of the wall - the contractor is responsible to submit to the Development Engineering Division a certification sealed by a Kansas licensed engineer verifying the wall is built per the approved design.

Garage door and framing installations shall be installed to resist a 90 mph wind load. The top of the stem wall at the door shall be installed low enough to allow anchorage of the door track jamb bracket into the wood framing within 10 inches of the floor or per manufacturer installation instructions - see City of Lenexa handout *Residential Garage Doors*.

A **Ufer Ground** is required to be attached to footing rebar. This is an additional piece of rebar that is tied to the footing steel and comes out the top of the wall. It should be high enough above the top of the wall to be easily identified. The approximate location of the Ufer Ground in the wall should be noted on the inspection, i.e. East wall, 5' from back corner. This location identification is necessary in the event the Ufer Ground is inadvertently cut off and needs to be located.

FOR MORE INFORMATION

City of Lenexa Department of Community Development
12350 W 87th Street Parkway, Lenexa, Kansas 66215
913/477-7500 (FAX) 913/477-7730

Revised December 30, 2016



City of Lenexa - One and Two Family
Special Inspection Certification Report
CONCRETE – FOUNDATION and RETAINING WALLS

Project Address _____ Permit Number _____
Owner/Builder _____ Inspection Date _____
Inspector _____ Phone # _____
Company Performing Inspection _____

The inspector shall indicate the type of inspection(s) being certified. Erosion control shall be in place and functionally in compliance with City of Lenexa requirements prior to inspection.

Site Conditions (all must comply)

- ☐ City approved plot plan and building construction plans on site.
- ☐ Erosion control is in place and functional (must be substantially in compliance with City requirements and functional for inspection to be performed)
- ☐ Building setbacks per approved plot plan
- ☐ Cold weather protection on site

Forms and Reinforcement

- ☐ Wall forms centered on footings
- ☐ Wall thickness as specified on approved plans.
- ☐ Reinforcement installed per approved plans
- ☐ Hold downs placed and installed properly
- ☐ Future garage slab to be one of the following:
 - ☐ Slab on grade
 - ☐ Structural slab on over dig
 - ☐ Suspended slab
- ☐ Future basement slab to be one of the following
 - ☐ Slab on grade
 - ☐ Structural slab at over dig
 - ☐ Structural slab

Retaining walls (for multiple walls on the plot plan clarify which walls are being inspected in the comments)

- ☐ Installation per approved plans

Foundation Wall Height Verification

- ☐ Top of wall within +4-inch of elevations shown on approved plot plan.

Walls Elements and Details

- ☐ Minimum low opening (MLO) and floor elevations (MFE) are as specified on the approved plot plan _____.
(Note: Separate MLO/MFE certification required by licensed surveyor prior to any inspection beyond foundations)-if applicable
- ☐ Concrete window wells installed in accordance with City approved plans – (on MLO/MFE sites provide concrete well integral with foundation extending to footing)
- ☐ MLO / MFE not applicable
- ☐ Walk-out/daylight limits are as specified on approved plot plan
- ☐ Wall openings installed in accordance with City approved plans
- ☐ Top of wall and steps formed a minimum of 8" above proposed grading contours.
- ☐ Undermined fdn elements (recommendation in comments and/or attached report)
- ☐ Max. 12" block down at garage doors.
- ☐ Ufer Ground attachment rod left exposed (Give approx. location in comments)

Comments: _____

This is to certify that I, or qualified individuals working under my direction, inspected and/or tested the above checked items in accordance with the applicable City approved building and site plans, previous inspection results, codes and engineering details. The work is complete and to the best of my knowledge was found to be in substantial compliance with the City of Lenexa approved plans and specifications.

SEAL

Certifier Signature _____ Date _____
(Certification and seal by licensed Kansas engineer or architect required)

For City use only ___ approved ___ denied by _____ Date _____

Revised December 30, 2016



**City of Lenexa - One and Two Family
Special Inspection Certification Report
CONCRETE – FOOTINGS & STRUCTURAL SLABS**

Project Address _____ **Permit Number** _____

Owner/Builder _____ **Inspection Date** _____

Inspector _____ **Phone #** _____

Company Performing Inspection _____

The inspector shall indicate the type of inspection(s) being certified. Erosion control shall be in place and functionally in compliance with City of Lenexa requirements prior to inspection. The Footing Elevation Certification shall be checked and submitted to the City with this certification form.

Site Conditions (all must comply if applicable)

- ☐ City approved plot plan and building construction plans on site.
- ☐ Erosion control is in place and functional (inspection shall not be performed if erosion control is not functionally in compliance with the City requirements).
- ☐ Building setbacks per approved plot plan
- ☐ Soils – bearing capacity as determined by:
 - ☐ Bearing on undisturbed soil @ 1,500 psf
 - ☐ Soils report (comment and/or attach report)
 - ☐ Fill per engineering report
 - ☐ Free of organic material
- ☐ Cold weather protection on site

Footing Elevation Certification – submit completed form with special inspection report

- ☐ City of Lenexa “Footing Elevation Certification” form completed by contractor has been reviewed for completeness and allowable tolerances.

Structural Slab

- ☐ Formed and Reinforced Per City Approved Drawings
- ☐ Suspended floor slab (over usable space)
- ☐ Garage structural slab per approved plan.
- ☐ Basement structural slab per approved plan.
 - ☐ 6 mil vapor barrier installed – not required for garage slab
 - ☐ Isolation rings or block-outs are provided over pier pads for columns

Footings

- ☐ Reinforced per city approved plans.
- ☐ Pier foundation per approved plan
- ☐ Deck/porch/balcony piers
- ☐ Footing – width, depth and location
- ☐ Solid jumps
- ☐ Frost depth (min. 36 inches)
- ☐ Column pads – basement
- ☐ Column pads – basement structural slab
- ☐ Column pads – garage steel column
- ☐ Column/pad at garage structural slab
- ☐ Undermined fdn elements (recommendation in comments and/or attached report)
- ☐ Ufer Ground attachment rod provided

Comments: _____

This is to certify that I, or qualified individuals working under my direction, inspected and/or tested the above checked items in accordance with the applicable City approved building and site plans, codes and engineering details. The work is complete and to the best of my knowledge was found to be in substantial compliance with the City of Lenexa approved plans and specifications.

SEAL

Certifier Signature _____ **Date** _____.

(Certification and seal by licensed Kansas engineer or architect required)

For City use only ____ **Approved** ____ **Denied** By ____ **Date** _____

Revised December 30, 2016